REMARKS

The non-final Office Action of April 20, 2006, has been carefully reviewed and this response addresses the concerns stated in the Office Action. All objections and rejections are respectfully traversed.

I. STATUS OF THE CLAIMS

Claims 1-4, 6-16, and 18-33 are still pending in the application.

Claims 5, 17, and 34-36 have been previously cancelled without prejudice.

Claims 1, 3, and 18 have been amended to provide proper antecedent basis. No new matter has been added.

Claims 1-4, 6-16, and 18-33 are rejected under 35 U.S.C. § 112, first paragraph as failing to comply with the written description requirement

Claims 1-4, 18, and 20 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite because certain terms lack antecedent basis.

Claims 1-4, 7-16, and 18-33 are rejected under 35 U.S.C. § 103(a) as being unpatentable over McKnight, U.S. Patent No. 6,557,035, filed on March 30, 1999, issued April 29, 2003 (McKnight), in view of Urevig et al., U.S. Patent No. 6,154,787, filed on January 21, 1998, issued November 28, 2000 (Urevig).

Applicant respectfully points out that McKnight issued April 29, 2003, almost 2 ½ years after the filing of the present application (December 11, 2000). Applicant therefore reserves the right under 37 C.F.R. § 1.131 to swear behind McKnight.

Applicant respectfully points out that Urevig issued November 28, 2000, within a year of the filing of the present application. Applicant therefore reserves the right under 37 C.F.R. § 1.131 to swear behind Urevig.

II. CLAIM REJECTIONS UNDER 35 U.S.C. § 112, SECOND PARAGRAPH

On page 3, in paragraph 4, with respect to claims 1, 9, 15, 23, and 29, the Office Action states that the limitation "to obtain historical utilization data pertaining to the historical availability to the computer of each monitored hardware resource" lacks support in the specification to comply with the written description.

In rebuttal to the above, Applicant respectfully refers to Applicant's Specification, page 6, lines 8-20. Applicant states, in this part of the specification, that memory utilization data such as average storage bits numbers, low balances, and swapping information, are received into a gateway from a network element, statistical or other analyses are performed by the central management station, and the raw and analyzed data are stored. From these data, a time to fail based on resource utilization is predicted. Applicant's claimed "historical utilization" is supported in Applicant's Specification because average storage bits numbers, low balances, and swapping information are examples of historical utilization of memory. Applicant's claimed "historical availability" is supported in Applicant's Specification because statistics such as, for example, low balances, can indicate, among other things, memory availability. Averages of these statistics are necessarily based on historical information. It is submitted that claims 1, 9, 15, 23, and 29 are supported in Applicant's Specification, and that the Specification complies with the written description requirement. For this reason, Applicant requests the withdrawal of the rejection of claims 1, 9, 15, 23, and 29 under 35 U.S.C. § 112, second paragraph.

On page 3, the Office Action states that the limitation in claims 1, 15, and 29 of "automatically reserving or ordering an additional physical hardware resource that is not in the computer when the signal is provided and which is to be later manually physically added to the computer after the reserving or placing of an order" or "automatically allocating for manual physical addition" lacks support in the specification to comply with the written description requirement.

In rebuttal to the above, Applicant respectfully refers to Applicant's Specification, page 7, lines 16-22, and page 9, lines 18-25, which state that the any addition of resources can be automatically accomplished, and that when the resources are automatically added, the central management station instructs the gateway to communicate to the network element

device and issue commands to allocate the resources. On page 2, lines 4-5, Applicant's Specification states that before the present invention, resources were manually added long after a need for the same arose, and sometimes the added resources were retained when no longer needed. On page 3, lines 18-20, Applicant's Specification states that the present invention reduces downtime by allocating or reserving a resource when its need is predicted. It is submitted that claims 1, 15, and 29 are supported in Applicant's Specification, and that the Specification complies with the written description requirement. For this reason, Applicant requests the withdrawal of the rejection of claims 1, 15, and 29 under 35 U.S.C. § 112, second paragraph.

III. CLAIM REJECTIONS UNDER 35 U.S.C. § 112, FIRST PARAGRAPH

On page 3, in paragraph 6, the Office Action states that claims 1-4, 18, and 20 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite because the term "the signal" lacks antecedent basis. Applicant has herein amended claims 1, 18, and 20 to clarify terminology.

IV. CLAIM REJECTIONS UNDER 35 U.S.C. § 103(a)

On pages 3-7 of the Office Action, the Office Action has rejected claims 1-4, 6-16, and 18-33 under 35 U.S.C. § 103(a) as being unpatentable over McKnight view of Urevig.

Applicant respectfully asserts that claims 1-4, 6-16, and 18-33 are patentable over the combination of McKnight and Urevig because:

(1) McKnight does not disclose or suggest Applicant's claimed statistical analysis technique specific to each monitored hardware resource (Applicant's independent claims 1, 9, 15, 23, and 29).

(2) McKnight does not disclose or suggest Applicant's claimed new statistical analysis technique (Applicant's independent claims 1, 9, 15, 23, and 29).

(3) Urevig does not disclose Applicant's claimed prediction of a future level of availability associated with a first signal, and McKnight and Urevig cannot be combined without rendering McKnight unsatisfactory for its intended purpose (Applicant's independent claims 1, 3, 9, 15, 23, and 29).

(4) Urevig does not disclose or suggest Applicant's claimed additional physical hardware resource that is not in the computer when the first signal is provided (Applicant's independent claims 1, 9, 15, 23, and 29).

(5) The Office Action does not state a rejection for the final clause of claims 1, 15, and 29 which states that the additional physical hardware resource is to be later manually physically added to the computer after the reserving or placing of an order (Applicant's independent claims 1, 15, and 29).

(6) McKnight does not disclose Applicant's claimed analyzing available applications (Applicant's independent claims 7, 14, 21, and 28).

In order for a rejection under 35 U.S.C. §103 to be sustained, the Office Action must establish a prima facie case of obviousness. To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the reference itself or in the knowledge generally available to one of ordinary skill in the art, to modify the reference. Second, there must be a reasonable expectation of success. Finally, the prior art reference must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in Applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

The patentability of claims 1-4, 6-16, and 18-33 is further supported by the following remarks/arguments.

On pages 4, 7, and 8, in paragraphs 9, 16, 21, 23, and 24, with respect to claims 1, 9, 15, 23, and 29, the Office Action states that McKnight discloses establishing a statistical analysis technique specific to each monitored hardware resource (McKnight, FIG. 4, Abstract, col. 5, lines 61-67, the Office Action states that McKnight states "applies linear regression to stored running average performance parameters to determine performance parameters trends").

In rebuttal to the above, Applicant respectfully points out that McKnight does not disclose or suggest Applicant's claimed statistical analysis technique specific to each monitored hardware resource because McKnight states a single statistical analysis technique,

i.e. linear regression applied to stored running average performance parameters, for all resources, and because there is no teaching in McKnight that would allow establishing a connection between a specific statistical analysis technique and a monitored hardware resource. For example, in McKnight's FIGs. 3 and 4, no distinction whatsoever is made between hardware resources, and because there is nowhere in McKnight an accommodation for associating a specific analysis technique with a hardware resource. Because of this lack of accommodation, one of ordinary skill in the art would conclude that the system of McKnight is not capable of such customization as Applicant has claimed, i.e. Applicant's claimed statistical analysis technique specific to each monitored hardware resource. For these reasons, it is submitted that McKnight, either alone or in combination with Urevig, does not make obvious under 35 U.S.C. § 103 Applicant's claims 1, 9, 15, 23, and 29.

On pages 5, 7, and 8, in paragraphs 9, 16, 21, 23, and 24, with respect to claims 1, 9, 15, 23, and 29, the Office Action states that McKnight discloses automatically executing a new statistical analysis technique based on a second signal (McKnight, FIG. 5, col. 3, line 55 – col. 5, line 52, the Office Action states that McKnight states "determining CPU, memory, disk, LAN, system and disk and memory bottleneck").

In rebuttal to the above, Applicant respectfully points out that McKnight does not disclose or suggest Applicant's claimed new statistical analysis technique because McKnight states a single statistical analysis technique that involves computing running averages for each hardware resource in succession. McKnight does not disclose or suggest Applicant's claimed step of automatically executing a new statistical analysis technique based on a second signal because McKnight's system is built around a single statistical analysis technique applied to CPU, memory, etc., (see McKnight Fig. 5). McKnight discloses no way to change from one statistical analysis technique to a new statistical analysis technique, nor any signals which could trigger such a change. For these reasons, it is submitted that McKnight nor Urevig nor their combination can make obvious Applicant's claims 1, 9, 15, 23, and 29 under 35 U.S.C. § 103.

On pages 5, 6, and 8, in paragraphs 9, 11, 21, and 24, with respect to claims 1, 3, 9, 15, 23, and 29, the Office Action states that McKnight does not specifically disclose Applicant's claimed without user intervention, responding to the first signal by automatically reserving or ordering an additional physical hardware resource that is not in the computer

when the signal is provided, but that Urevig disclose without user intervention, responding to the first signal by automatically reserving or ordering an additional physical hardware resource that is not in the computer when the signal is provided.

In rebuttal to the above, Urevig does not disclose or suggest Applicant's claimed responding to the first signal, reserving or ordering an additional hardware resource that is not in the computer because (1) there is not disclosed in Urevig Applicant's claimed first signal corresponding to a prediction of a future level of availability failing to meet an availability threshold, and (2) in the system of Urevig, the hardware resources must all be in the computer to which they might eventually be assigned because nowhere in Urevig is there any physical reconfiguration disclosed or suggestion.

With respect to point (1), Urevig does not disclose Applicant's claimed prediction of a future level of availability associated with a first signal because, in the system of Urevig, an application such as a backup operation simply determines that it needs another tape drive and requests one from the pool of available tape drives. Applicant's claimed prediction of a future level of availability, associated with Applicant's claimed first signal, is a characteristic of a hardware resource, and is not disclosed or suggested by Urevig because Urevig's hardware resources are either in the pool, and therefore available, or they are not in the pool. There is no device in the pool of Urevig that is associated with a characteristic such as "might be unavailable in the future". Further, Urevig does not disclose or suggest an availability threshold associated, with Applicant's claimed first signal, because the system of Urevig requires no such parameter.

Still further, McKnight specifically addresses the condition of a server bottleneck by monitoring resource utilization and suggests actions based on the results of the monitoring. The Office Action suggests that Urevig's resource pooling can be combined with McKnight's server bottleneck detection. In fact, the system of Urevig could render McKnight unsatisfactory for its intended purpose, because the applications in Urevig can request assignment of resources, an action that could easily render the reconfiguration suggestions of McKnight useless or incorrect. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984) teaches that if the proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. It is submitted that McKnight and Urevig cannot be

combined without rendering McKnight unsatisfactory for its intended purpose, and thus claims 1, 3, 9, 15, 23, and 29 are not made obvious under 35 U.S.C. § 103 by McKnight and Urevig.

With respect to point (2), Urevig does not disclose or suggest Applicant's claimed additional physical hardware resource that is not in the computer when the first signal is provided because Urevig states that resources such as peripheral devices are configures as shareable units and accessed by any host data processing system as the need arises. Devices that are shareable are physically connected to each computer, thus are in the computer, that shares them, but can each only be assigned to a particular computer. For these reasons, it is submitted that claims 1, 9, 15, 23, and 29 are not made obvious under 35 U.S.C. § 103.

Further, with respect to claims 1, 15, and 29, the Office Action does not state a rejection for the final clause of claims 1, 15, and 29 which states that the additional physical hardware resource is to be later manually physically added to the computer after the reserving or placing of an order. It is submitted that since neither McKnight nor Urevig nor their combination discloses or suggests Applicant's claimed manual physical addition of physical hardware resources, and since the Office Action has not provided a citation to reject this limitation, claims 1, 15, and 29 are not made obvious under 35 U.S.C. § 103.

On pages 6 and 8, in paragraphs 12 and 22, with respect to claims 4 and 18, the Office Action states that Urevig discloses without user intervention, enabling the reduction of the monitored hardware resources when the prediction indicates that the monitored hardware resources will not be required.

In rebuttal to the above, as stated previously, Urevig does not disclose or suggest Applicant's claimed prediction because of the future level of availability of each monitored hardware resource because Urevig does not disclose any such characteristic associated with hardware resources. Further, as stated previously, McKnight and Urevig cannot be combined without rendering McKnight unsatisfactory for its intended purpose. For these reasons, it is submitted that claims 4 and 18 are not made obvious under 35 U.S.C. § 103 by McKnight, Urevig, or their combination.

On pages 6 and 8, in paragraphs 14, 20, 22, and 23, with respect to claims 7, 14, 21, and 28, the Office Action states that McKnight discloses analyzing available application with respect to the utilization by the available applications of the monitored hardware resources.

In rebuttal to the above, McKnight does not disclose Applicant's claimed analyzing available applications because McKnight's sole reference to "applications" occurs in the textual information provided to users when there are resource bottlenecks. Nowhere does McKnight disclose or suggest Applicant's claimed analyzing applications with respect to utilization because such a capability would involve tracking applications in the same way that McKnight tracks CPU, memory, disks, and LANs, and there is no disclosure or suggestion in McKnight to this effect. Further, Urevig does not disclose or suggest Applicant's claimed analyzing available applications. For these reasons, it is submitted that claims 7, 14, 21, and 28 are not made obvious under 35 U.S.C. § 103 by McKnight, Urevig, or their combination.

On pages 7 and 8, in paragraphs 18, 23, and 24, with respect to claims 11, 12, 25, 26, 31, and 32, the Office Action states that McKnight does not specifically disclose adding the hardware resources to said computer from a remote location and removing the hardware resources from said computer, but that Urevig discloses adding the hardware resources to said computer from a remote location and removing the hardware resources from said computer. As previously stated, McKnight cannot be modified by the addition of Urevig without rendering McKnight unsatisfactory for its intended purpose. For this reason, it is submitted that claims 11, 12, 25, 26, 31, and 32 are not made obvious under 35 U.S.C. § 103 by McKnight, Urevig, or their combination.

It is submitted that claims 2, 6, 8, 10, 13, 16, 19, 20, 22, 24, 27, 30, and 33 are not made obvious under 35 U.S.C. § 103 by McKnight, Urevig, or their combination, at least by virtue of their dependence upon independent claims 1, 9, 15, 23, and 29 which are not made obvious under 35 U.S.C. § 103 as explained above.

V. CONCLUSION

Since McKnight and Urevig, separately or in combination, do not either teach or suggest each and every element of Applicant's amended independent claims 1, 9, 15, 23, and 29, and claims 2-4, 6-14, 16, 18-22, 24-28, and 30-33, which depend therefrom, and since Applicant has overcome rejections under 35 U.S.C. § 112, Applicant's independent claims 1, 9, 15, 23, and 29, and claims 2-4, 6-14, 16, 18-22, 24-28, and 30-33, which depend therefrom, are not made obvious by the combination of McKnight and Urevig, and meet the statutory requirements of 35 U.S.C. § 112, and the rejections under 35 U.S.C. § 103(a) and 35 U.S.C. § 112 should be withdrawn.

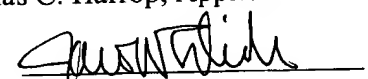
Applicant respectfully asserts that amended independent claims 1, 9, 15, 23, and 29, and claims 2-4, 6-14, 16, 18-22, 24-28, and 30-33, which depend therefrom, are in condition for allowance. Applicant respectfully requests the withdrawal of the rejections under 35 U.S.C. § 103(a) and 35 U.S.C. § 112 with regards to amended independent claims 1, 9, 15, 23, and 29, and claims 2-4, 6-14, 16, 18-22, 24-28, and 30-33, which depend therefrom, for the reasons set forth above.

Although no new fees are anticipated, Applicant herein authorizes the Commissioner for Patents to charge any fees or credit overpayment to Deposit Account No. 50-1078.

The following information is presented in the event that a call may be deemed desirable by the Examiner: Jacob N. Erlich (617) 832-3000

Respectfully submitted,
Thomas C. Harrop, Applicant

Date: July 20, 2006

By: 
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